



## Alliance of Automobile Manufacturers: Position on Multiple Models



**From:** Ms. Julie Becker, Vice President, Environmental Affairs, Alliance of Automobile Manufacturers  
**To:** Mr. Chester J. France, Director, Assessment and Standards Division, US EPA  
Ms. Julie Abraham, Director, Office of International Policy and Harmonization, NHTSA  
Mr. John Holmes, Senior Staff Officer, National Research Council (NRC)  
**Date:** March 6, 2008

**Note:** *This context of this letter was recommendations from the Alliance to EPA, NHTSA, and the NRC on how the NRC should approach assessing fuel economy technology improvements for the NRC study, "Assessment of Fuel Economy Technologies for Light-Duty Vehicles", which was ultimately published in 2011*

**Subject:** *Model Usage for Assessing LDV Technologies Impact*

*"Our purpose in writing this letter is to encourage you in your final deliberations to use more than one modeling approach in estimating the potential improvements in fuel economy expected from the deployment of the individual technologies you are considering as well as combinations of those technologies. Our expectation would be that if the estimated fuel economy impacts generated by different models are similar, then the results would be considered robust. If there were significant discrepancies between estimates generated by one or more models, then either the accuracy of the models or the veracity of an individual model's fuel economy improvement estimate should be considered suspect."*



## Alliance of Automobile Manufacturers (AAM): Criteria for Proper Modeling



March 2008 letter from Alliance to EPA/NHTSA/NRC

Alliance of Automobile Manufacturers

*"In evaluating each modeling approach we believe that the panel should consider the following:*

Model Evaluation Criteria, per AAM	EPA Modeling
Are the <u>inputs</u> for each model well defined?	✓
Is the <u>baseline</u> -- against which the impacts of the deployment of fuel economy improvement technologies are being assessed -- uniform and well defined?	✓
Is it clear how the impacts of the application of fuel economy technologies are being modeled?	✓
Is it clear how a model addresses the <u>cumulative impact</u> of multiple fuel economy technologies?	✓
Is the model capable of addressing the impacts of <u>different drive cycles</u> on fuel economy?	✓
Has the model been <u>validated</u> against data from actual vehicles?	✓
Does the model hold <u>relevant attributes</u> (e.g. weight, 0 to 60 time, gradability, and towing capacity) <u>constant</u> when assessing the impacts of fuel economy technologies?"	✓

**AAM:** "We believe that it is critical that the answer to each of the above questions be yes."